Overview of QuADRANT Work Package 3:
Main Survey
Expert Interviews
Literature Review

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Institute of Oncology Ljubljana, Slovenia

Second QuADRANT Workshop
January 13-14, 2022
QUADRANT
SPECIFIC OBJECTIVES

- review the status of implementation of clinical audits in the Member States;

- identify good practices in Member States and available guidance and resources for clinical audits, at national, European and international level;

- provide further guidance and recommendations on improving the implementation and integration of clinical audits into national healthcare systems;

- identify potential for further coordinated EU action on quality and safety of radiology, radiotherapy and nuclear medicine.
**MAIN SURVEY METHODOLOGY**

**PRE-SURVEY**
March-April 2020
of relevant national professional society contacts

**WP3 TEAM**
Team leader: Prof. Howlett
to prepare & refine questions for the Main Survey

**WP2 WORKSHOP**
14-16 December 2020
invitations

online meetings
email exchange
feedback & outcomes from the WP2 workshop

**Feedback from the:**
- Steering Group
- Advisory Board
- consortium members
- members of the EC

**Question list for the Main Survey**

**PILOT VERSION**
26th February 2021
↓
4th March 2021
- to test the functionality
- to finalize the questions

Consortium
Advisory Board
Steering Group

**FINAL VERSION OF THE MAIN SURVEY**
March 2021
MAIN SURVEY
DISTRIBUTION & RESPONSE RATES

25th March – 7th May 2021

Questionnaire (28 questions in 2 sections)
- explanatory sheet
- set of definitions
- demographic data

Distribution list:
- national health authority
- national audit & radiation protection competent authority representatives
- HERCA – WGMA (via HERCA representatives in the QuADRANT)
- members of the national professional societies (by ESR, ENAM, ESTRO)

EU 27 + 4 countries (+ Iceland, Norway, Switzerland, UK) \{ 83 respondents \}

In what capacity did respondents reply to the survey?

[Bar chart showing responses]
### MAIN SURVEY

**DISTRIBUTION & RESPONSE RATES**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of responses</th>
<th>Country</th>
<th>Number of responses</th>
<th>Country</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1</td>
<td>Greece</td>
<td>1</td>
<td>Poland</td>
<td>2</td>
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<tr>
<td>Belgium</td>
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<td>Hungary</td>
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<td>Portugal</td>
<td>2</td>
</tr>
<tr>
<td>Bulgaria</td>
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<td>Iceland</td>
<td>2</td>
<td>Romania</td>
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<tr>
<td>Croatia</td>
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<td>Ireland</td>
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<td>Slovakia</td>
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<tr>
<td>Cyprus</td>
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<td>Italy</td>
<td>1</td>
<td>Slovenia</td>
<td>4</td>
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<tr>
<td>Czech Rep</td>
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<td>Latvia</td>
<td>3</td>
<td>Spain</td>
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<tr>
<td>Denmark</td>
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<td>Lithuania</td>
<td>2</td>
<td>Sweden</td>
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<tr>
<td>Estonia</td>
<td>3</td>
<td>Luxembourg</td>
<td>1</td>
<td>Switzerland</td>
<td>3</td>
</tr>
<tr>
<td>Finland</td>
<td>2</td>
<td>Malta</td>
<td>2</td>
<td>United Kingdom</td>
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<tr>
<td>France</td>
<td>4</td>
<td>Netherlands</td>
<td>4</td>
<td>United Kingdom</td>
<td>5</td>
</tr>
<tr>
<td>Germany</td>
<td>3</td>
<td>Norway</td>
<td>2</td>
<td>United Kingdom</td>
<td>5</td>
</tr>
</tbody>
</table>

**One response** = 7 countries
- national level position, 4
- representatives of national societies, 3

**Multiple responses** = 24 countries
- national health authority/audit administrator, 13
- national radiation protection competent authority, 28
### MAIN SURVEY

#### CLEANING PROCES (ANALYSIS OF CONFLICTING/DIVERGENT RESPONSES)

- **tick-box** (»tick all options that apply«)
- **dropdown** (»select the single answer that applies«)

**INCLUSIVE/COMPLEMENTARY** approach

**HIERARCHICAL SYSTEM** to obtain a coherent single set of responses/country

Responses **weighted** according to the capacity in which the respondent was answering.

#### Hierarchy for section 1 responses

<table>
<thead>
<tr>
<th>National Health Authority rep.</th>
<th>National Audit Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Radiation Protection Authority / Competent Authority rep.</td>
<td></td>
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</tbody>
</table>

#### Hierarchy for section 2 responses

<table>
<thead>
<tr>
<th>National Health Authority rep.</th>
<th>National Audit Administrator</th>
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<tbody>
<tr>
<td>National HERCA (WGMA) rep.</td>
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</table>

- clinical audit
- practice
- infrastructure

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<th>National Radiation Protection Authority / Competent Authority rep.</th>
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<tr>
<td>National Health Authority rep.</td>
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## Expert Interviews

### METHODOLOGY

**AIM:** to provide additional context for & commentary on the Main Survey

- **List of interviewees:** proposed by the Steering Group/Advisory Board (April 2021)
  - WP3 team selected 8+1 experts; list agreed with the EC

<table>
<thead>
<tr>
<th>Name of the expert</th>
<th>Area of expertise</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Arturo Chiti</td>
<td>Nuclear Medicine</td>
<td>IT</td>
</tr>
<tr>
<td>Prof. Michael Lassmann</td>
<td>Nuclear Medicine</td>
<td>DE</td>
</tr>
<tr>
<td>Mr. Nils Reynders-Frederix</td>
<td>Radiology</td>
<td>BE</td>
</tr>
<tr>
<td>Prof. Mika Kortesniemi</td>
<td>Radiology</td>
<td>FI</td>
</tr>
<tr>
<td>Dr. Aude Vaandering</td>
<td>Radiotherapy</td>
<td>BE</td>
</tr>
<tr>
<td>Dr. Mary Coffey</td>
<td>Radiotherapy</td>
<td>IE</td>
</tr>
<tr>
<td>Ms. Rachael Ward</td>
<td>HERCA</td>
<td>UK</td>
</tr>
<tr>
<td>Ms. Alexandra Karoussou-Schreiner</td>
<td>HERCA</td>
<td>LU</td>
</tr>
<tr>
<td>Dr. Raija Seuri</td>
<td>Radiology</td>
<td>FI</td>
</tr>
</tbody>
</table>

- **Questions for the interview:** drafted by the WP3 team
  - reviewed by the Steering Group/Advisory Board (1st June – 15th June 2021)
  - **10 questions:**
    - personal experience
    - barriers for implementation
    - suggestions for potential solutions
    - best practice
    - view on the QuADRANT initiative & Main Survey
    - key messages extracted from the answers...

- **Interviews:**
  - written questionnaire & written responses
  - sent on 28th June 2021, deadline 26th July 2021
  - completed by all 9 experts
EXPERT INTERVIEWS

RESULTS & CONCLUSIONS

• Understanding of the concept of CA is not uniform

• Big differences in the organization structure of CA & level of their implementation
  - insufficient priority at the national level
  - insufficient resources: financial & human

Cooperation between regulators and professional associations
Stable funding
Training in CA (within the national professional education/training programs)
Patient organizations
Common reference document (guidelines)

Participating in CO program as a requirement for:
  • hospital accreditation
  • healthcare professional registration to practice
LITERATURE REVIEW

= part of the project tender proposal

• Consortium members, Steering Group, Advisory Board
  15th → 22nd June 2020
  20th → 30th April 2021 (update)

• ESR Office Staff (PubMed website)

4 teams:
• to address broad areas of the literature
  - assessment of the relevance of the assigned literature to the QuADRANT project
  - summarizing key points from the literature

Clinical Audit – led by Prof Howlett
   Michael Brada, Ana Geão, Boris Brkljacic, Werner Jaschke
Radiation Protection, Justification, Safety – led by Mary-Louise Ryan
   Manuel Bardies, Harry Delis, Primož Strojan
Quality Assurance – led by Gianfranco Brusadin
   Wolfgang Wadsak, Efi Koutsouveli, Adrian Brady
Unclassified/Other Literature – led by Francesco Giammarile
   Mary Coffey, Jörg Hausleiter, Steve Ebdon-Jackson

Deliverable D3.4
   (August 2021)
   Redrafted & additional references included
   (November 2021)

93 references:
• The legal basis for Clinical Audit
• Methodological aspects of implementing clinical audit
   (5 subchapters)